

2008 Pollworker Survey Analysis Report

November, 2008 General Election

Prepared By: Paul Drugan Prepared For: The Los Angeles County Registrar-Recorder/County Clerk Preparation Date: June, 2009

- Executive Summary

The Los Angeles County Registrar-Recorder/County Clerk's Office (RR/CC) releases its 4th Pollworker Survey Analysis Report¹. The Reports, begun in 2006, track polling place, Check in Center (CIC) and equipment issues as reported by the County's polling place Inspectors.

The surveys are mailed to each of the Inspectors who are confirmed to have worked in the current election, and are sent approximately 2 weeks after Election Day.

The surveys offer valuable insights into how RR/CC operations respond to the demands of elections and how these responses differ, if at all, between elections.

For this election approximately 60 percent of the Inspectors filled out and returned their surveys. The return rate is consistent with prior elections.

The responses show that key indicators of Election Day operations have improved, in some cases dramatically, across election types. There is also some evidence that polling place and troubleshooting efforts improve during elections with heavier voter turnout.

Several important highlights include:

- 67 percent of those surveyed dropped their ballots off at CICs before 9:30 p.m. and 93 percent dropped them off before 10:00 p.m.;
- 97 percent of respondents waited less than 1 hour when depositing their ballots and supplies. This represents a 21 percent increase over 2006;
- Coordinators contacted Inspectors before Election Day nearly 84 percent of the time, improving pre-election contact by over 17 percent from 2006;
- 98.5 percent of Inspectors reported that their Coordinator visited their polling place on Election Day; an increase of over 10 percent since November 2006;
- Equipment function continued to improve with 81.2 percent reporting their unit functioned properly on Election Day, an 11 percent increase over 2006.

Statistical tests were performed on sets of variables and are included in Appendix A. The tests, using correlation measures, showed the following results:

- If a Coordinator contacted an Inspector before Election Day the Coordinator was more likely to visit the polling place;
- Inspectors who dropped off their ballots later tended to wait longer at Check in Centers;
- Coordinators tended to contact older Inspectors before Election Day;
- Malfunctioning units tended to be replaced on a rolling basis; if a unit malfunctioned in the morning it tended to be replaced in the morning.

¹ Previous Reports include the February, 2008 Presidential Primary Election, the June, 2008 Statewide Direct Primary and the November, 2006 Gubernatorial General Election.

Based on results of the full Report, recommendations include the following:

- Continue recruitment and training practices established for the November, 2008 General Election. Recruitment may be difficult for subsequent elections due to "election burnout" or disinterest but November 2008 goals should be kept in place;
- Expand the online poll worker training program to all Inspectors, Coordinators and Neighborhood Voting Center (NVC) Directors. Lead Election Day workers should be as knowledgeable as possible to assist clerks in their job functions. Mandatory training will refresh information from previous elections and stress changes in procedures and policies from past elections;
- Design and implement a survey at the end of the online poll worker training program that tracks demographic, usability and other pertinent data;
- Standardize definitions of equipment "repairs" and "replacements" and log statistics for each election. This practice allows management to differentiate between the two terms to determine if there are pieces of equipment that are left inoperable, missing or not repaired.
- Set goals to require Coordinators to visit 100 percent of their precincts on Election Day. 98.5 percent of all Coordinators visited their polling places on Election Day.² RR/CC policy should establish verification protocols that ensure all Coordinators comply with this policy.

-Section I The November 2008 Inspector Survey Report: Components

The Inspector Survey Report focuses on three main areas: CIC operations, Coordinator and Poll Worker interaction, and equipment issues. Specifically, it presents information about Coordinator contact with Inspectors before and during Election Day, equipment usage and function, and CIC wait times for Inspectors after the polls close.

This Report is presented in the three critical policy areas mentioned above. It analyzes questions relevant to each area and discusses possible variable relationships that might explain links between policy and performance.

The Methodology and Justification sections are included in Appendix A and discuss changes made to the survey and the statistical tests used to determine relationships. Appendix B includes the Data Entry and Analysis code book used for this particular survey report and Appendix C presents the survey used for this Report.

² The 1.5 percent difference could be attributed to a margin of error or another survey-related bias. However, an Election Day reporting mechanism should be installed at Norwalk Headquarters to ensure that 100 percent of Coordinators visit their assigned polling places.

-Section II Questions 2 and 3 – Check in Center (CIC) Operations

Check in Centers are located throughout Los Angeles County and are operated by trained staff members who receive voting supplies and ballots from each Inspector after the polls close on Election Night along with an assigned clerk.

Voted ballots are sealed in red boxes, scanned at CICs and prepared for secure transport to Norwalk Headquarters. Provisional and Vote By Mail (VBM) ballots are also transported in separate security envelopes to Norwalk where they are prepared for signature verification.

In order to measure CIC performance, survey questions asked the respondents to report when they arrived and dropped their supplies off and how long they waited in line to do so. Graph 1 below tracks the percentage of respondents who dropped their ballots off before 9:30 PM on Election Night and who waited at their CICs less than one hour.

There are approximately 75 CICs used in each countywide election and each accommodates nearly 60 precincts.



% Reporting That They Waited Less Than 1 Hour And Dropped Off Ballots Before 9:30 PM

The slight decline in November, 2008 is attributed to high turnout and heavy traffic at polling places. For example, the November election had, on average, 582 voted ballots per precinct while the June, 2008 Statewide Direct Primary showed an average of 103 per precinct. Compared to the November, 2006 election, those who waited 1 hour or less increased by over 16 percent.

Poll Workers at polling places in high turnout elections take longer to process paper work and load ballots and supplies for Inspectors. However, even though there were over 5 times the voted ballots per precinct in the November 2008 election, the decline in ballot drop offs and waits at CICs was only .8 percent.

-Section III Questions 4,5 and 6 - Coordinator and Poll Worker Interaction

Coordinators contact Inspectors before Election Day to give them their contact information and to discuss any issues prior to Election Day. They act as liaisons with RR/CC Headquarters and also monitor their assigned polling places throughout the day.

Graph 2 below shows marked improvement in Coordinator contact since the November, 2006 election. 83.8 percent of Inspectors reported that their Coordinators contacted them prior to Election Day. This represents a 17.7 percent increase from 2006.

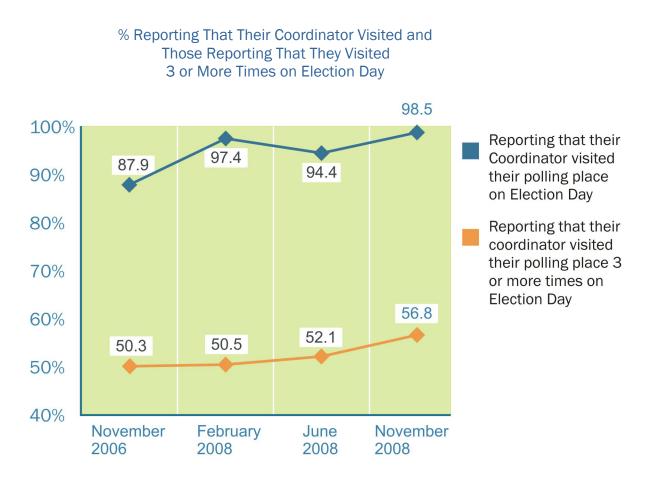
Coordinators are highly trained individuals who are assigned approximately 15 polling places each to monitor on Election Day. Coordinators are required to attend specialized training courses and to participate in and pass an extensive online poll worker training course.



As previously noted, Coordinators visit polling places on Election Day to monitor proper poll set-ups, supply polling places with any missing supplies and either correct machine malfunctions or report to Regional Distribution Centers (RDCs) to pick up and deliver replacement equipment to precincts. Coordinators are responsible for 10-20 precincts on average and are required to visit their assigned polling places from when polls open at 7:00 AM until they close at 8:00 PM.

According to the survey nearly 100 percent of Coordinators - 98.5 percent - visited their polling places and 56.8 percent visited them 3 times or more. According to the responses below, the number of Coordinators performing their primary function increased almost 11 percent from November, 2006.

Questions 4,5 and 6 – Coordinator and Pollworker Interaction



-Section IV Questions 7 through 16 - Voting Equipment Function

The InkaVote Plus system was implemented in 2004 and consists of a Precinct Ballot Reader (PBR), which provides voters with "second chance" voting.³ The system also includes an Audio Ballot Booth (ABB) which assists voters with special needs. The ABB consists of a key pad and headphones and provides audio instructions and ballot choices in 7 languages. Voters navigate through the ballot, make choices, and cast their ballots.

The PBR and the ABB are programmed in advance of Election Day, checked, and shipped to distribution centers for Inspectors to pick up and install in their respective polling places.

In the most recent survey, 81 percent of respondents reported that their equipment functioned without problems the entire day – an increase of 11 percent from 2006. Of the 19 percent who had problems, most of them (70 percent) said that they experienced problems with their PBR. This is consistent with percentages from prior years disregarding a spike in June, 2008 where nearly 80 percent of those reporting problems said they occurred with the PBR.⁴

³ Second chance voting consists of a function in the PBR that kicks back a ballot if there is an "over vote". An over vote occurs when a voter votes for more candidates than a contest allows. That voter can either over ride the ballot and have it counted as is or, they can choose to invalidate the ballot and vote a new one. Blank ballots – those with no votes cast – fall into the same category and can either be cast or invalidated and voted again.

⁴ It is important to note that reports of specific problems with machinery are not articulated in this survey.

-Section IV-

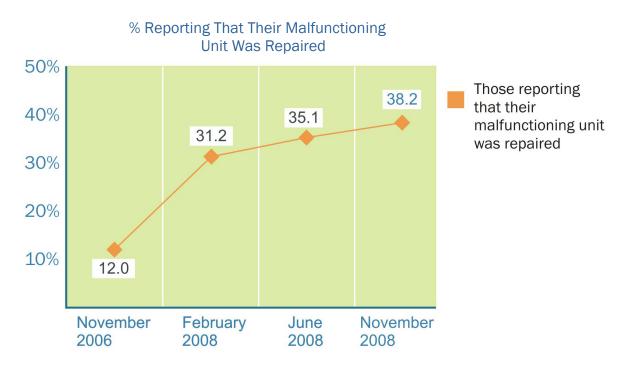
Questions 7 through 16 - Voting Equipment Function



% Reporting That Their Units Functioned Properly All Day



Those reporting their units functioned properly all day According to the figures below, the most dramatic change in the survey questionnaire was the number of respondents reporting that their PBRs were repaired if they malfunctioned. Nearly 40 percent said their units were repaired⁵ – up 26 percent from 2006.



Additionally, those who reported malfunctions in the morning tended to have their units repaired in the morning. Statistical tests in Appendix A show strong evidence that there is a relationship between when a unit was reported to malfunction and when it was repaired. That relationship has grown stronger over each election and 62.7 percent of respondents – more than ever – reported that their malfunctioning unit was repaired in the morning.



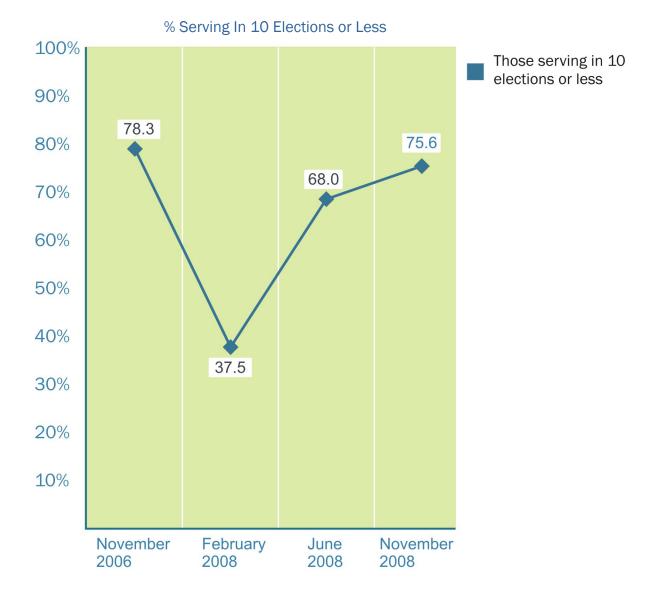
% Reporting That Their Unit Was Repaired In The Morning

⁵ Technical or software issues are not repaired in polling places; only hardware issues such as missing wheels or ballot jams are resolved.

-Section V Gender, Elections Served and Age

Females have consistently outpaced males as Inspectors in every election studied. There have been no large fluctuations in percentages, with females serving slightly over 60 percent since at least November, 2006.

The graph below shows that over three quarters of respondents working in the November, 2008 election served in 10 elections or less which is a dramatic increase from the February, 2008 Primary Election where only 37.5 percent of respondents had served at most in 10 elections. An interesting note is that 62.6 of Inspectors during the February Primary Election – more than double in any other election studied – served in at least 11 elections, meaning more experienced Inspectors served in that election. Conversely, 24.4 percent of Inspectors who participated in the November, 2008 General Election served in at least 11 elections meaning newer Inspectors, or those serving in 10 elections or less, participated in larger numbers in the Presidential Election⁶ than before.



⁶ While 51-61 year olds continued to be the dominant age category of those serving, more Inspectors aged 18-39 served in the November, 2008 election (13.3 percent) than had in any of the 4 elections studied.

- Appendix A METHODOLOGY AND JUSTIFICATION

Questionnaire and Database Redesign

Both the survey questionnaire and the database were redesigned in order for data to be collected and entered to facilitate effective analysis.

The Microsoft Access database was also modified to accommodate the questionnaire redesign and to provide ordered categories in order to reduce the number of variable recodes.

Database Coding and Re-Coding Methodology

Data was imported from MS Access into SPSS for coding, recoding and analysis. Variable fields were renamed and some were recoded to rearrange categories within questions. An explanation of the recoding procedure follows below.

Yes/No answers were given new variable names but were not recoded; only chronological data was recoded. It was necessary to reorder some chronological information because several database categories did not correspond to logical chronology (i.e. 8:30-9:30 before 7:30-8:30). It was also necessary to categorize and code the variable (Time Served) that designates how many elections each respondent has served.

The table below shows the MS Access variable name and whether it was binary or ordinal, and the new SPSS data table name. An explanation and justification of each recoded item follows. Note that the new variable names may be different from the previous report but the data remains the same.

MS Access Variable Name	Binary/Chron./Numerical	SPSS Variable Name	Recode				
Time Served	Chronological (Ordinal)	Timeserve	Yes				
Drop off time	Chronological (Ordinal)	Droptime	No				
Wait at drop off	Chronological (Ordinal)	Dropwait	No				
Contact w/Pct Coor	Binary	Coorcontact	No				
Did Coord visit	Binary	Coorvisit	No				
If yes # times	Numerical	Coortimes	No				
Voters use ABB	Binary	Abbused	No				
Reader/ABB function	Binary	Abbpbrfunc	No				
Unit Malfunction	Binary	Malunit	No				
Time of Malfunction	Chronological (Ordinal)	Maltime	No				
Was unit repaired	Binary	Repair	No				
When was unit repaired	Chronological (Ordinal)	Repairtime	No				
Was unit replaced	Binary	Replaced	No				
What time	Chronological (Ordinal)	Replacetime	No				
PBR received	Binary	Pbrrecvd	No				
DOB	Chronological (Ordinal)	Age	Yes				
Gender	Binary	Gender	No				

Table 1. Variable Changes and Recodes

Timeserve was recoded to produce proper chronological time frames. The original data was entered as a string variable (single number) from 0 to 75. The recode grouped numerical data into categories for presentation and measurement purposes (i.e., "0-10, 11-20", etc.)

Age was recoded to produce age in years and placed in proper chronological time frames. The original data was entered as birth date, (mm/dd/yyyy) and calculated to produce age in years. Following that calculation, age in years was grouped into ordered categories for presentation and measurement purposes.

SPSS Variable Name	Variable Definition			
Timeserve	What time did you arrive at CIC			
Droptime	What time did you drop off ballots at CIC			
Dropwait	How long did you wait at CIC			
Coorcontact	Did Coordinator contact you before election day			
Coorvisit	Did Coordinator visit you before election day			
Coortimes	If yes, how many times			
Abbused	Did voters use the Audio Ballot Booth			
Abbpbrfunc	Did your unit function properly			
Malunit	If no, which unit malfunctioned			
Maltime	What time was the malfunction			
Repair	Was the unit reparired			
Repairtime	What time was the repair			
Replaced	Was the unit replaced			
Replacetime	What time was the unit replaced			
Pbrabbreceived	Did you receive a PBR/ABB			
Age	Age range			
Gender	Gender			

Table 2. Variable Definitions

Data Analysis Methodology

The analysis contains three methods of measurement. These are frequencies, cross tabulations, and correlation measurements.

Frequencies are the number of times an event occurs, calculated numerically (i.e. 356 respondents answered "yes" to question 3), and percentages (47 percent of respondents answered "yes"). The measurement is useful for an overview of complete responses and is used to design charts and graphs for single variables. Frequencies are also valuable to track changes in responses over time.

Cross tabulations are numerical and percentage comparisons of two or more variables. Cross tabulations are used in this report to measure potential relationships between two variables or to show the relationship in percent of one variable to another (i.e. 74 percent of African American voters voted for John Kerry). Cross tabulations are beneficial for two reasons: they present findings in tabular form and they can measure relationships by performing standard statistical tests for linearity. For example, one can determine the relationship between Droptime and Dropwait by a cross tabulation table that applies a correlation measure for the strength of the relationship. The current analysis uses correlations between two variables, although they can also be used for multiple variables. Correlation measures are presented in Table 4. They show statistical significance, direction and strength of the association. For example, the correlation between Droptime and Dropwait showed a positive and significant relationship with a significance level of .000 (anything above .05 is considered not significant) and a Pearson correlation coefficient which portrays a weak but significant and positive relationship. Therefore, one could say with .99 percent confidence that the two variables could be related. Further, one could test the assumption that the wait time at a CIC depended on when the Inspector arrived to drop off ballots.

Research Findings

A. Frequency Reports

The frequency report provides responses to each question included in the survey as well as percentages of responses within the category where the majority of responses reside. Also included in the table below are responses from the RR/CC's November 2006, February 2008 and June 2008 Surveys for comparison purposes.

Variable Name	Grouping ⁷	Percentage Nov '08	Percentage June '08	Percentage Feb '08	Percentage Nov '06				
Timeserve	0 to 10 times	75.6	68.0	37.5	N/A ⁸				
Droptime	9-9:30 PM	46.9	44.4	43.9	47.4				
Dropwait	0-30 minutes	85.2	76.9	75.4	67.6				
Coorcontact	Yes	83.8	75.4	77.3	66.1				
Coorvisit	Yes	98.5	94.4	97.4	87.9				
Coortimes	3 times	56.8	52.1	50.3	50.3				
Abbused	No	83.2	89.7	89.7	82.2				
Abbpbrfunc	Yes	81.2	77.4	73.8	69.7				
Malunit	PBR	70.1	78.7	70.0	71.8				
Maltime	Before 7 AM	32.6	46.8	46.2	28.4				
Repair	No	61.8	64.9	68.8	87.9				
Repairtime	AM (6-11:59)	62.7	67.6	67.0	77.8				
Replaced	Replaced No		75.1	79.0	N/A ⁹				
Replacetime	Afternoon (12-5 PM)	48.1 ¹⁰	51.1	47.8	35.1				
Pbrrecvd	Yes	99.2	75.8	N/A	N/A				
Age	62-72 ¹¹	29.1 ¹²	28.9	29.9	26.2				
Gender	Female	63.5	63.2	61.0	61.9				

Table 3. Frequency Responses

⁸ Figures not available for 2006.

⁷ Grouping is the response category where the majority of responses fall.

⁹ 2006 data base category improperly constructed – yes and no answers grouped together.

¹⁰For the 2009 Survey, the majority fell into the AM category.

¹¹The category for June '08 shifted to the 51-61 category.

¹²For the 2009 survey the majority age category switched to 51-61 year olds.

B. Cross Tabulations

Cross tabulations are performed to determine which variables have potential relationships and to determine the strength and direction of those relationships. The analysis includes variables with the highest measures of association, making them likely candidates for further testing.

C. Correlations

Correlation testing was also performed on selected variable sets to test the strength, direction and significance of their relationships based on a cross tabulation grid. All relationships proved significant, though moderate to weak, and positive. That is, they are probably not independent of each other. There is some evidence that the hypothetical statements following each set of variable relationships above are supported at the 99th percentile.

The following correlation table shows the variable relationships, their correlation coefficient, and the significance of the relationship. Significance is suggested if the value in column three is <.05.

Table 4. Correlation Tests¹³

Variable Relationship	Correlation Coeff. (Kendall's tau-b and Pearson's R)	Significant (Y/N)	Direction (+/-)
Maltime*Repairtime	.496 - tau ¹⁴	Y (.000)	+
Dropwait*Droptime	.159 - tau	Y (.000)	+
Coorcontact*Coortimes	.107 - Pearson's	Y (.000)	+
Coorcontact*Coorvisit	.152 - Pearson's	Y (.000)	+

Although all measurements in Table 5 show potential relationships we can only state with some confidence that they may not be independent of one another because of their weak correlation coefficients. If these numbers approached 1 there would be very strong evidence that the independent and dependent variables are directly related to each other and would have a perfect linear relationship (a unit change in *x* produces the same unit change in *y*). The significant variable relationships are listed below with descriptive assumptions.

- Maltime*Repairtime: The time of the malfunction is related to the time of repair. If a malfunction was reported in the morning it tended to be repaired in the morning.
- Dropwait*Droptime: The time that Inspectors waited at the CIC depended on when they dropped off their ballots. Inspectors who dropped them off later tended to wait longer.

¹³What Correlation Tests Suggest; Statistical measures above are tests used to determine if there are potential relationships between (in this case) two variables, or if one is independent of the other. That is, if variables are linearly related, a change in the x variable corresponds with some type of change in the y variable. For example, in the strongest relationship we observe -Maltime*Repairtimethe time a machine is repaired is dependent on the time it malfunctioned. It would be intuitively erroneous to state the reverse.
¹⁴Kendall's tau-b is an accepted statistic to measure ordinal variables (categories of time, age, income levels, etc.) while Pearson's R is usually used to measure nominal variables (yes/no/maybe, democrat/republican, etc.).

 Coorcontact*Coortimes: If a Coordinator contacted an Inspector before Election Day that Coordinator tended to visit the Inspector more times on Election Day.

 Coorcontact*Coorvisit: If a Coordinator contacted an Inspector before Election Day that Coordinator tended to visit the Inspector on Election Day.

- Appendix B SPSS CODE BOOK

November, 2008 General Election

SPSS Variable: Variable Name: Variable Description: Coding:	1 Timeserve How Many Times Have You Served? 2 = First Time 3 = 1-10 Years 4 = 11-20 Years 5 = 21-30 Years 6 = 1-40Years 7 = Over 40 Years
SPSS Variable: Variable Name Variable Label: Coding:	2 Droptime Drop off time 2 = 8:00 - 8:30PM 3 = 8:30 - 9:00PM 4 = 9:00 - 9:30PM 5 = 9:30 - 10:00PM 6 = 10:00 - 10:30PM 7 = 10:30 - 11:00PM 8 = 11:00 - 11:30PM 9 = 11:30 - 12:00
SPSS Variable: Variable Name: Variable Label: Coding	3 Dropwaita Drop off wait 2 = 0.30 mins. 3 = 1 hr. 4 = 1.5 hrs. 5 = 2 hours 6 = 0ther
SPSS Variable: Variable Name: Variable Label: Coding:	4 Coorcontact Coordinator contact 2 = No 3 = Yes
SPSS Variable: Variable Name: Variable Label: Coding:	5 Coordinator Visit Did coordinator visit 2 = No 3 = Yes

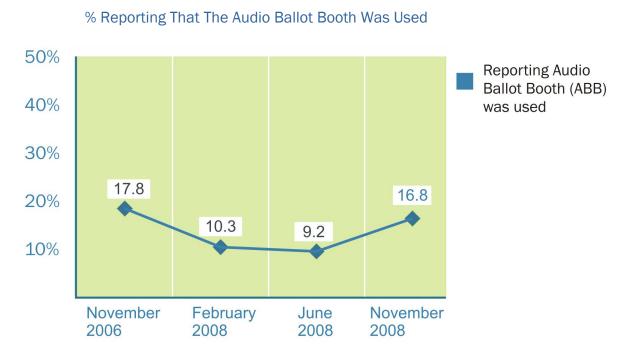
- Appendix B

SPSS Code Book

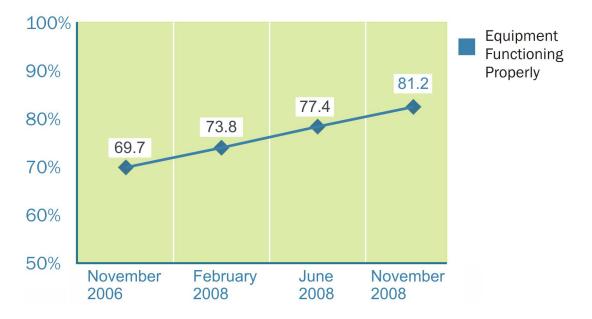
SPSS Variable: Variable Name: Variable Label: Coding:	6 Coortimes How many times did coordinator visit 2 = 1 3 = 2 4 = 3
SPSS Variable: Variable Name: Variable Label: Coding:	7 Pbrabbreceived Did you receive a PBR and an ABB 2 = No 3 = Yes
SPSS Variable: Variable Name: Variable Label: Coding:	8 Abbused Did voters use Audio Ballot 2 = No 3 = Yes
SPSS Variable: Variable Name: Variable Label: Coding:	9 Pbrabbused Reader/Audio Function Properly 2 = No 3 = Yes
SPSS Variable: Variable Name: Variable Label: Coding:	10 Malunita Which unit malfunctioned? 2 = ABB 3 = PBR 4 = Both
SPSS Variable: Variable Name: Variable Label: Coding:	11 Maltime What time was malfunction? 2= Before 7AM 3 = 7 - 9AM 4 = 9 - 11AM 5 = 11 - 1PM 6 = 1 - 3PM 7 = 3 - 5PM 8 = 5 - 8PM 9 = Other
SPSS Variable: Variable Name Variable Label: Coding:	12 Repair Was unit repaired 2 = No 3 = Yes

- Appendix B-**SPSS Code Book** SPSS Variable: 13 Variable Name Repairtime Time of Repair Variable Label: 2 = AM(6:00AM-11:59AM)Coding: 3 = Afternoon(12:00PM-5:00PM)4 = PM(5:00PM-8:00PM)SPSS Variable: 14 Replaced Variable Name: Was unit replaced Variable Label: 2 = No Coding: 3 = YesSPSS Variable: 15 Variable Name: Replacetime Time of replacement Variable Label: 2 = AM(6-11:59)Coding: 3 = Afternoon(12:00-5:00)4 = PM(5:00-8:00)SPSS Variable: 16 Gender Variable Name: Variable Label: Gender 2 = F Coding 3 = M SPSS Variable: 17 Variable Name: Age Variable Label: Age Range 1 = 18 to 28 Coding: 2 = 29 to 39 3 = 40 to 50 4 = 51 to 61 5 = 62 to 726 = 73 and over

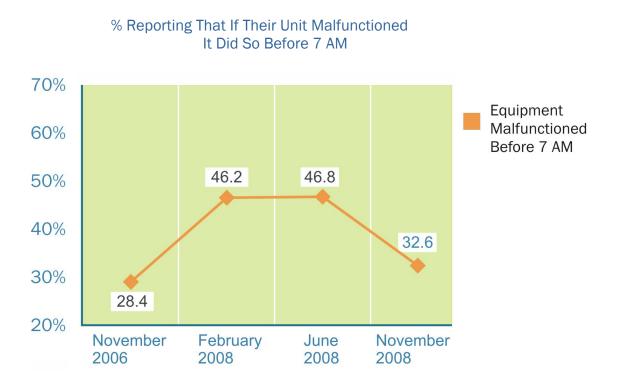
- Appendix C GRAPHS



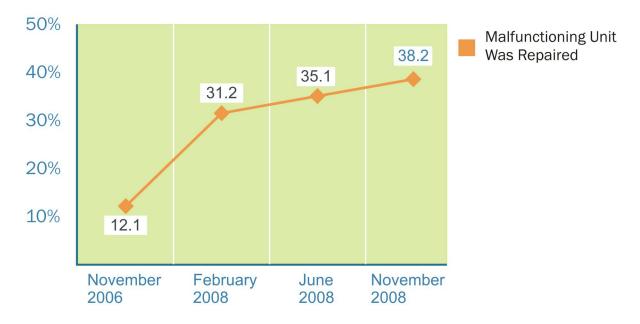
% Reporting That Their Unit Functioned Properly



Graphs

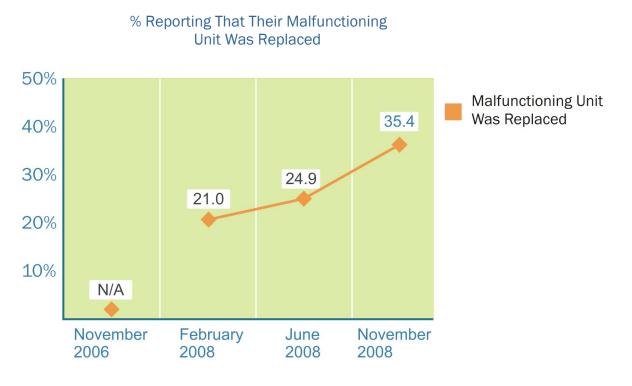


% Reporting That Their Malfunctioning Unit Was Repaired



20

Graphs



*Data not available for November 2006







Graphs



% Of Inspectors That Are Female



Poll Worker Survey STATEWIDE SPECIAL AND 05/19/2009

TEST

Please submit this survey in the enclosed postage paid envelope. Please mail by December 10, 2008. The survey will help us improve services to poll workers and voters in future elections. *Thank you!* PLEASE ANSWER ALL QUESTIONS.



PRECINCT:	0050004B
INSPECTOR	
Rec # 1	
6/2/09	3:11 pm

Ballot Drop-Off

1. Where did you drop off your ballots and other equipment on Election Night?

2. /	٩pp	proximately what	t time did yo	u arrive at the ba	llot drop off	site?						
		8:00-8:30PM		9:01-9:30PM		10:01-10:30	PM		11:01-11:	30PM	[
		8:31-9:00PM		9:31-10:00PM		10:31-11:00	PM		11:31-12:	00PM	[
3. 1	Iov	v long was your	wait at the ba	allot drop off site	?							
[] 0	-30 minutes	🛛 1 hr.	□ 1.5 hrs.	2 hrs	. 🛛 3 hrs.		ther				
Co	m	munication	/Support									
				Precinct Coordinate	ator before F	lection Day?	🛛 NO			\$		
				sit your polling			_	🛛 YES		5		
				r Precinct Coord					cle One)	1	2	3
In	ka	Vote Plus R	Reader - H	Equipment l	Function							
				DER and an Aud			O NO	0	YES			
		any voter use the							YES			
9. Did your Reader and/or Audio Ballot Booth function the entire day?												
If N	IO ,	to QUESTIO	N 9 ABOV	E, please comp	lete the fol	lowing:						
10.	Wł	nich unit malfun	ctioned?			-						
		BALLOT READ		AUDIO BALLO		🗆 both						
11.	Ap	proximately what	at time did th	e unit malfunctio	on?							
		Before 7:00 Al	M 🛛	11:01-1:00PM		5:01-8:00PM	[Other				
		7:01-9:00AM		1:01-3:00PM		Other AM						
	0.	9:01-11:00AM		3:01-5:00PM		Other PM						
12.	Ple	ase describe the	malfunction	?								
13.	Wa	s unit replaced?	1		0 NO	□ YES			_			
14.	lf Y	ES , what time?	🗆 AM(6-11:59)	□ AFTER	NOON (12:00-5	:00) [] PM(5	:01-8:00)			

Please add any additional comments on reverse. Thank you for your service.